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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/596,743

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Stefan L. Bartscher

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EXAMINER

KENNEDY, JOSHUA T

ART UNIT

PAPER NUMBER

3679

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/596,743	Applicant(s) BURTSCHER, STEFAN L	
	Examiner JOSHUA T. KENNEDY	Art Unit 3679	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claims 1-14 have been examined.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7 and 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ozawa et al (US Patent 5,802,788) in view of Kollegger (WO 01/65023).

Regarding claim 1, Ozawa et al disclose an anchorage for at least one pre-tensioned or stressed tensile element having:

one or more wedges (2,5);

an anchor body (3), having a modulus of elasticity that is lower compared to the modulus of elasticity of other parts of the anchorage (5), characterized in that:

at least one of the wedge and the anchor body is formed by at least by two

adjacent layers (2,5) with at least one of the layers being formed from a material

having a lower modulus of elasticity (5; Column 8) than the material from which

the another further layer or layers of the wedge (2) and/or of the anchor body are formed.

However, though Ozawa et al discloses that the configuration of the member (5) is not limited to a tubular configuration and can be of any suitable configuration (Col 7, Lines 37-39), Ozawa et al do not disclose the greatest thickness of said at least one of the wedge- shaped layers measured normal to the longitudinal axis of the tensile element is provided in the region near the load.

Kollegger teaches a similar anchorage for a pre-tensioned or loaded strength member having a wedge layer (3) being of a different material than the wedge against which it acts and its greatest thickness of said at least one of the wedge- shaped layers measured normal to the longitudinal axis of the tensile element is provided in the region near the load (Fig 1) so that a desired distribution of stresses between the tensile element and the wedge layer can be achieved based on the shape of the wedge layer (3). It would have been obvious to a person of ordinary skill in the art to modify Ozawa et al as a person with ordinary skill has good reason to pursue the known options within his or her technical grasp. In turn, because the instant invention as claimed has the properties predicted by the prior art, it would have been obvious to make the body (5) of Ozawa et al in the shape of a wedge having the greatest thickness in the region near the load as taught by Kollegger in order to gain the commonly understood benefits and applications of such an adaptation and/or modification, such as altering the shape of the more elastic wedge member such that a desired distribution of stresses between the tensile element and the more elastic wedge layer can be achieved based on the

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aforementioned shape. A method of enhancing a particular class of devices (in this case, anchorages) in this way has been made part of the ordinary capabilities of one skilled in the art based upon the teaching of such improvement in other situations.

Regarding claim 2, Ozawa et al disclose slots (Fig 8) being arranged in the layer formed from the material having a lower modulus of elasticity to reduce the stiffness thereof in a direction normal to the longitudinal axis of the tensile element.

Regarding claim 3, it is the patentability of the product, and not recited process steps, that is to be determined in product-by-process claims irrespective of whether or not only process has been recited. Accordingly, it is of little consequence how the layers of different moduli of elasticity were formed when layers of different moduli of elasticity are present. See MPEP § 2113.

Regarding claim 4, Ozawa et al disclose the anchor body (3) as a coupling for two tensile elements being provided with seats for wedges, the seats being oriented opposite to each other (Fig 5).

Regarding claims 5 and 10, Ozawa et al disclose the layer formed from the material having a lower modulus of elasticity is connected to an adjacent layer having a higher modulus of elasticity via a non-positive or a positive connection (Fig 5) comprising a profile with a counterprofile (Col 5, lines 56-57; Col 6, lines 47-54)

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Regarding claims 6 and 11, Ozawa et al disclose a transmission of shearing force between the wedge and the tensile element is ensured by a non-positive connection or by form closure (Col 5, lines 56-57; Col 6, lines 47-54) comprising friction/ the shaping of a profile.

Regarding claims 7, 12 and 13, Ozawa et al disclose the anchorage significantly as claimed, but do not disclose the ratio of the lower modulus of elasticity to the a higher modulus of elasticity is at least 1:2, at least 1:10, or in a range from 1:20 to 1:30. It is not inventive to state the optimum values of a thickness of the bearing portion. Although silent on the ratio of moduli of elasticity, the device of Ozawa et al inherently has a modulus of elasticity relative to the strength of connection desired. Through routine experimentation and optimization, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the wedge layers of Ozawa et al in view to have the ratio of the lower modulus of elasticity to the a higher modulus of elasticity is at least 1:2, at least 1:10, or in a range from 1:20 to 1:30 because this is merely the application of the of the expected level of skill on the part of one of ordinary skill. No new and unexpected results are produced.

Regarding claims 9 and 14, Ozawa et al disclose at least one of the wedge and the anchor body is, formed from a material having the higher modulus of elasticity and is provided with filling materials, such as aluminum oxide, that result in the higher

increasing the modulus of elasticity (Col 9, Lines 7-12).

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ozawa et al in view of Kollegger as applied to claims 1-7 and 9-12 above, and further in view of Thal (US Patent 4,744,691).

Ozawa et al in view of Kollegger disclose the anchorage significantly as claimed but do not disclose the wedge-shaped layer having a lower modulus of elasticity being formed by two partial wedge-shaped layers with different moduli of elasticity.

Thal teaches a similar anchorage system having a wedge comprised of a two piece member having different moduli of elasticity (Fig 7) to strengthen the connection of the wedge directly to the tensile member. It would have been obvious to a person of ordinary skill in the art to modify the anchorage of Ozawa et al in view of Kollegger as a person with ordinary skill has good reason to pursue the known options within his or her technical grasp. In turn, because the instant invention as claimed has the properties predicted by the prior art, it would have been obvious to make the wedge of a two piece member having different moduli of elasticity (Fig 7) to strengthen the connection of the wedge directly to the tensile member. All the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination yielded nothing more than predictable results to one of ordinary skill in the art. KSR, 550 U.S. at ___, 82 USPQ2d at 1395; Sakraida v. AG Pro, Inc., 425 U.S. 273, 282, 189 USPQ 449, 453 (1976); Anderson 's-Black Rock, Inc. v. Pavement Salvage Co., 396 U.S. 57, 62-63,

163 USPQ 673, 675 (1969); Great Atlantic & P. Tea Co. v. Supermarket Equipment Corp., 340 U.S. 147, 152, 87 USPQ 303, 306 (1950).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Japanese Publications 2006-176957, 2004-308203, 2003-278314 and 09-207117 cited to show similar anchorage systems.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOSHUA T. KENNEDY whose telephone number is (571)272-8297. The examiner can normally be reached on M-F: 7am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571) 272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

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USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Joshua T. Kennedy/
Examiner, Art Unit 3679

/Daniel P. Stodola/
Supervisory Patent Examiner, Art Unit 3679